

CLAIM LISTING

1. (Previously Presented) A method of designing a logic circuit to provide a predetermined logical operation, the method including the steps of:
 - (a) defining a logic synthesis block comprising a single dynamic logic circuit;
 - (b) performing logic synthesis for the predetermined logical operation to produce an intermediate circuit, the logic synthesis being performed utilizing a synthesis library constrained to the logic synthesis block;
 - (c) eliminating unused devices in the intermediate circuit to produce a final circuit; and
 - (d) sizing the devices in the final circuit.
2. (Currently Amended) The method of Claim 1 wherein the step of defining the logic synthesis block includes selecting the largest practical dynamic AND/OR circuit for the integrated circuit fabrication technology in which the logic circuit is to be implemented.
3. (Original) The method of Claim 2 wherein the logic synthesis block comprises a four high and four wide dynamic AND/OR circuit.
4. (Original) The method of Claim 1 wherein the step of performing logic synthesis includes leaving the size of the devices in the logic synthesis block substantially unconstrained.

1 5. (Original) The method of Claim 1 wherein the step of eliminating unused devices from
2 the intermediate circuit includes detecting devices having a state that remains constant as
3 the intermediate circuit operates to provide the predetermined logical operation.
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5 6. (Original) The method of Claim 1 wherein the step of sizing the devices in the final
6 circuit includes analyzing the final circuit to determine the characteristics of each device
7 in the final circuit necessary in order to consistently provide the predetermined logical
8 operation and meet drive requirements.
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10 7. (Original) The method of Claim 1 wherein the logic synthesis block uses a single
11 activation/reset clock signal.
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13 8-12 Canceled
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15 13. (Currently Amended) In a circuit design method utilizing a logic synthesis tool and
16 predefined logic circuit library to provide a logic implementation for a predetermined
17 logical operation, the improvement comprising:

- 18 (a) defining a logic synthesis block comprising a single dynamic logic circuit; [[and]]
19 (b) in performing logic synthesis for the predetermined logical operation to produce
20 an intermediate circuit, constraining the logic synthesis tool to the logic synthesis
21 block;
22 (c) eliminating unused devices in the intermediate circuit to produce a final circuit;
23 and

1 (d) sizing the devices in the final circuit.

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3 14. Canceled

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5 15. (Original) The method of Claim 13 wherein the step of defining the logic synthesis block
6 includes selecting the largest practical dynamic AND/OR circuit for the circuit
7 fabrication technology in which the circuit design is to be implemented.

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9 16. (Original) The method of Claim 13 wherein the logic synthesis block comprises a four
10 high and four wide dynamic AND/OR circuit.

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12 17. (Original) The method of Claim 13 further including the step of leaving the device size
13 in the logic synthesis block substantially unconstrained for the logic synthesis tool.

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15 18. (Original) The method of Claim 13 wherein the logic synthesis block uses a single
16 activation/reset clock input.